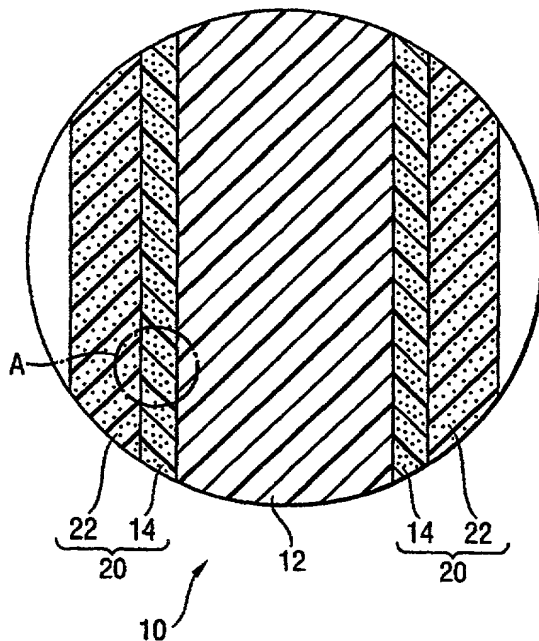




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(54) Title: METHOD FOR PRODUCTION OF POLYELECTROLYTE MEMBRANES AND FUEL CELL



## (57) Abstract

A method for producing a polyelectrolyte membrane, including the step of immersing a basic polymer such as a polybenzimidazole in a strong acid having a concentration sufficient to impregnate the basic polymer with six or more strong acid molecules per polymer repeating unit of the basic polymer at a temperature of not less than 30 °C for a period of 5 h or less, as well as a fuel battery having the polyelectrolyte membrane. Hence, the times required to immerse the basic polymers in the strong acids can be shortened and the proton conductivity of the polyelectrolyte membranes can be improved.